

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**FOIL when  $A \neq 1$  SLTN (version 130)**

**FOIL the expressions shown below:**

1.  $(5x - 7)(-5x + 6)$

$$\begin{aligned} & (5)(-5)x^2 + (5)(6)x + (-7)(-5)x + (-7)(6) \\ & (-25)x^2 + (30)x + (35)x + (-42) \\ & -25x^2 + 65x - 42 \end{aligned}$$

2.  $(-3x - 6)(-8x - 7)$

$$\begin{aligned} & (-3)(-8)x^2 + (-3)(-7)x + (-6)(-8)x + (-6)(-7) \\ & (24)x^2 + (21)x + (48)x + (42) \\ & 24x^2 + 69x + 42 \end{aligned}$$

3.  $(-9x - 5)(4x - 8)$

$$\begin{aligned} & (-9)(4)x^2 + (-9)(-8)x + (-5)(4)x + (-5)(-8) \\ & (-36)x^2 + (72)x + (-20)x + (40) \\ & -36x^2 + 52x + 40 \end{aligned}$$

4.  $(9x - 7)(2x + 4)$

$$\begin{aligned} & (9)(2)x^2 + (9)(4)x + (-7)(2)x + (-7)(4) \\ & (18)x^2 + (36)x + (-14)x + (-28) \\ & 18x^2 + 22x - 28 \end{aligned}$$

5.  $(-2x - 7)(6x - 7)$

$$\begin{aligned} & (-2)(6)x^2 + (-2)(-7)x + (-7)(6)x + (-7)(-7) \\ & (-12)x^2 + (14)x + (-42)x + (49) \\ & -12x^2 - 28x + 49 \end{aligned}$$

**FOIL the expressions shown below:**

6.  $(2x + 2)(6x - 4)$

$$\begin{aligned}(2)(6)x^2 + (2)(-4)x + (2)(6)x + (2)(-4) \\ (12)x^2 + (-8)x + (12)x + (-8) \\ 12x^2 + 4x - 8\end{aligned}$$

7.  $(-2x - 3)(2x - 7)$

$$\begin{aligned}(-2)(2)x^2 + (-2)(-7)x + (-3)(2)x + (-3)(-7) \\ (-4)x^2 + (14)x + (-6)x + (21) \\ -4x^2 + 8x + 21\end{aligned}$$

8.  $(5x - 2)(-7x - 9)$

$$\begin{aligned}(5)(-7)x^2 + (5)(-9)x + (-2)(-7)x + (-2)(-9) \\ (-35)x^2 + (-45)x + (14)x + (18) \\ -35x^2 - 31x + 18\end{aligned}$$

9.  $(9x - 2)(6x + 9)$

$$\begin{aligned}(9)(6)x^2 + (9)(9)x + (-2)(6)x + (-2)(9) \\ (54)x^2 + (81)x + (-12)x + (-18) \\ 54x^2 + 69x - 18\end{aligned}$$

10.  $(8x - 2)(-4x - 5)$

$$\begin{aligned}(8)(-4)x^2 + (8)(-5)x + (-2)(-4)x + (-2)(-5) \\ (-32)x^2 + (-40)x + (8)x + (10) \\ -32x^2 - 32x + 10\end{aligned}$$